

# **GROUNDWATER PROTECTION REGULATION**

## **Section 1. PURPOSE OF REGULATION**

Whereas:

- siting of land uses that have the potential to release hazardous waste, petroleum products, or other contaminants significantly increases the risk of contamination; and
- poor management practices, accidental discharges, and improper maintenance of these facilities may **lead to** the release of pollutants; and
- discharges of hazardous wastes, leachate, pathogens, and other pollutants have repeatedly threatened surface and ground water quality throughout Massachusetts; and
- surface and ground water resources in the Town of Walpole contribute to the town's drinking water supplies;

Therefore, the Walpole Board of Health adopts the following regulation, under its authority as specified in Section 11, as a preventative measure for the purpose of:

- preserving and protecting the Town of Walpole's drinking water resources from discharges of pollutants; and
- minimizing the risk to public health and the environment to the Town due to such discharges.

## **Section 11. SCOPE OF AUTHORITY**

The Walpole Board of Health adopts the following regulation pursuant to authorization granted by M.G.L. c.111 s.31 and s.122. The regulation shall apply, as specified herein, to all applicable facilities within the Zone two.

**This Regulation applies to all parcels within the Town of Walpole that have been designated by MA DEP within Zone 2.**

## **Section 111. DEFINITIONS**

For the purposes of this regulation, the following words and phrases shall have the following meanings:

Commercial fertilizers: Any substance containing one or more recognized plant nutrients which is used for its plant nutrient content and which is designed for use, or claimed by its manufacturer to have value in promoting plant growth. Commercial fertilizers do not include unmanipulated animal and vegetable manures, marl, lime, limestone, wood ashes, and gypsum.

Department: The Massachusetts Department of Environmental Protection.

Discharge: The accidental or intentional disposal, deposit, injection, dumping, spilling, leaking, incineration, or placing of toxic or hazardous material or waste upon or into any land or water so that such hazardous waste or any constituent thereof may enter the land or waters of the Commonwealth. Discharge includes, without limitation, leakage of such materials from failed or discarded containers or storage systems and disposal of such materials into any on-site leaching structure or sewage disposal system.

Hazardous Material: A product, waste or combination of substances which because of its quantity, concentration, or physical, chemical, toxic, radioactive, or infectious characteristics may reasonably pose a significant, actual, or potential hazard to human health, safety, welfare, or the environment when improperly treated, stored, transported, used, disposed of, or otherwise managed. Hazardous materials include, without limitation, synthetic organic chemicals, petroleum products, heavy metals, radioactive or infectious materials, and all substances defined as “toxic” or “hazardous” under Massachusetts General Laws (M.G.L.) Chapter 21C and 21E, using the Massachusetts Oil and Hazardous Substance List (310 CMR 40.0000). The definition may also include acids and alkalis, solvents, thinners, and pesticides.

Historical High Groundwater Table Elevation: A groundwater elevation which is determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey.

Landfill: A facility established (in accordance with a valid site assignment) for the purposes of disposing solid waste into or on the land, pursuant to 310 CMR 19.006.

Non-sanitary wastewater: Wastewater discharges from industrial and commercial facilities containing wastes from any activity other than collection of sanitary sewage, including, but not limited to, activities specified in the Standard Industrial Classification (SIC) Codes set forth in 310 CMR 15.004(6).

Open Dump: A facility which is operated or maintained in violation of the Resource Conservation and Recovery Act (42 U.S.C.4004(a)(b), or the regulations and criteria for solid waste disposal.

Septage: The liquid, solid, and semi-solid contents of privies, chemical toilets, cesspools, holding tanks, or other sewage waste receptacles. Septage does not include any material which is a hazardous waste, pursuant to 310 CMR 30.000.

Sludge: The solid, semi-solid, and liquid residue that results from a process of wastewater treatment or drinking water treatment. Sludge does not include grit, screening, or grease and oil which are removed at the headworks of a facility.

Treatment Works: Any and all devices, processes and properties, real or personal, used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation, or reuse of waterborne pollutants, but not including any works receiving a hazardous waste from off the site of the works for the purpose of treatment, storage, or disposal.

Use of Toxic or Hazardous Material: The handling, generation, treatment, storage, or management of toxic or hazardous materials.

Very Small Quantity Generator: Any public or private entity, other than residential, which produces less than 27 gallons (100 kilograms) a month of hazardous waste oil, but not including any acutely hazardous waste as defined in 310 CMR 30.136.

Waste Oil Retention Facility: A waste oil collection facility for automobile service stations, retail outlets, and marinas which is sheltered and has adequate protection to contain a spill, seepage, or discharge of petroleum waste products in accordance with M.G.L. c. 21.s. 52A.

**Zone 2**: means that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at approved yield, with no recharge from precipitation). It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone 2 shall extend up gradient to its point of intersection with prevailing hydrogeologic boundaries ( a groundwater flow divide a contact with till or bedrock, or a recharge boundary).

#### **Section IV. PROHIBITIONS**

A. Notwithstanding any land uses which are otherwise permitted by local, state, and / or other federal laws, the siting of any of the following is prohibited in the Zone 2.

1. landfills,
2. open dumps,
3. automobile graveyards and junkyards,
4. sludge and septage monofils,
5. stockpiles (disposal) of chemically treated snow and ice that have been removed from highways and roadways outside the Zone 2.
6. petroleum, fuel oil and heating oil bulk stations and terminals, including, but not limited to, those listed under Standard Industrial Classification (SIC) Codes 5171 and 5983. SIC Codes are established by the U.S. Office of Management and Budget and may be determined by referring to the publication, Standard Industrial Classification Manual and any subsequent amendments.

B. Facilities for the treatment or disposal of non-sanitary wastewater are prohibited, with the following exceptions.

1. Replacement or repair of an existing system is exempt if the existing design capacity is not exceeded; and
2. Treatment works approved by the Department and designed for the treatment of contaminated ground or surface waters and operated in compliance with 314CMR5.05(3) or 5.05(13); and
3. Publicly owned treatment works.

C. Facilities that generate, treat, store, or dispose of hazardous waste are prohibited, with the following exceptions;

1. very small quantity generators,
2. household hazardous waste collection centers or collection events,
3. waste oil retention facilities, and
4. treatment works for the restoration of contaminated ground or surface waters in compliance with M.G.L. c.21E and 310 CMR 40.000.

D. Removal of soil, loam, sand, gravel, or any other mineral substances within four feet of the historical high groundwater table elevation is prohibited with the following exceptions.

1. substances which are removed and redeposited within 45 days of removal on site to achieve a final grade greater than four feet above the historical high water mark; or greater than the original topographic elevation, whichever is less; and
2. excavations for the construction of wetland areas, ponds, building foundations or the installation of utilities including but not limited to retention and/or detention drainage basins and swales.

E. Land uses that result in impervious cover of more than 15% or 2500 feet of any lot, whichever is greater, are prohibited; unless a system of artificial recharge of precipitation is provided that will not result in the degradation of groundwater quality.

## **Section V. CONDITIONAL PROHIBITIONS**

The storage of certain waste material, chemicals, and petroleum products is prohibited except if contained in accordance with the following requirements.

1. storage of sludge and septage is prohibited unless storage is in compliance with 310CMR32.00
2. storage of roadway de-icing chemicals (sodium chloride, chemically treated abrasives, or other chemicals) and the storage of chemical fertilizers are both prohibited, unless the storage is in a structure that prevents the generation and release of contaminants or contaminated runoff.
3. storage of liquid hazardous materials, as defined in M.G.L.c.21E, and / or liquid petroleum products is prohibited unless the materials are stored;
  - a. above ground level, and
  - b. on an impervious surface, and
  - c. in containers (or above ground tanks) within a building, or outdoors in covered containers (or above ground tanks) designed and operated to hold either 10% of the total possible storage capacity of all containers, or 110% of the largest container's storage capacity, whichever is greater.

These storage requirements shall not apply to the replacement of existing tanks or systems for the keeping, dispensing or storing of gasoline provided the replacement is performed in a manner consistent with state and local requirements.

4. compliance with all provisions of this regulation must be accomplished in a manner consistent with Massachusetts Plumbing, Building, and Fire Code requirements.

## **Section VII. PENALTIES**

Failure to comply with provisions of this regulation will result in the levy of fines of not less than \$200.00, but no more than \$1000.00. Each day's failure to comply with the provisions of this regulation shall constitute a separate violation.

## **Section VIII. SEVERABILITY**

Each provision of this regulation shall be construed as separate to the end that, if any provision, or sentence, clause or phrase thereof, shall be held invalid for any reason, the remainder of that section and all other sections shall continue in full force and effect.

BOH adopted these regulations on May 25, 2000

Amended: January 23, 2001